4.4: Environmental Conditions

Chapter 4.4.1: Wetlands

4.4.1-1 INTRODUCTION

This chapter describes state and federal regulations that apply to wetlands, and existing wetlands within and adjacent to the Project site. It evaluates the effects of the Project on wetlands and discusses possible mitigation strategies.

4.4.1-2 METHODOLOGY

4.4.1-2-1 Regulatory Context

Federal and state legislation and regulatory programs govern activities with the potential to affect surface waters or wetlands. The following regulations protect wetlands and streams associated with the Project.

Clean Water Act (33 USC §§ 1251 to 1387)

The Clean Water Act (CWA), also known as the Federal Water Pollution Control Act, is intended to restore and maintain the chemical, physical, and biological integrity of U.S. waters. It regulates point sources of water pollution (i.e., discharges of municipal sewage, industrial wastewater, stormwater); non-point source pollution (i.e., runoff from streets, agricultural fields, construction sites and mining that enter waterbodies, from other than the end of a pipe); and the discharge of dredged or fill material into navigable waters and other waters of the U.S.

Section 404 of the CWA requires authorization from the Secretary of Army, acting through the U.S. Army Corps of Engineers (USACE) before dredged or fill material may be discharged into waters of the United States. Waters of the United States are defined by the USACE regulations, among other things, as: (1) all waters "which are currently used, or were used in the past, or may be susceptible to use in interstate or foreign commerce, including all waters which are subject to the ebb and flow of the tide"; (2) tributaries of such waters; and (3) wetlands adjacent to such waters. (33 CFR § 328.3[a]). Wetlands are defined by the USACE regulations as those areas "that are inundated or saturated by surface or ground water at a frequency and duration sufficient to support, and that under normal circumstances do support, a prevalence of vegetation typically adapted for life in saturated soil conditions. Wetlands generally include swamps, marshes, bogs, and similar areas." (33 CFR § 232.3[b]).

According to guidance issued by the U.S. Environmental Protection Agency, together with USACE, USACE will also assert jurisdiction over (1) wetlands adjacent to non-navigable tributaries that are relatively permanent and (2) wetlands adjacent to non-navigable tributaries that are not relatively permanent when those waters have a "significant nexus" to traditional navigable waters.

Activities authorized under Section 404 must comply with Section 401 of the CWA, which requires that applicants for federal permits or licenses for an activity that may result in a discharge to navigable waters must provide to the federal agency issuing a permit a certificate (either from the state where the discharge would occur or from an interstate water pollution control agency) that the discharge would comply with Sections 301, 302, 303, 306, 307, and 316 (b) of the CWA. However, certain nationwide permits from the USACE do not require Section 401 water quality certifications.

Fish and Wildlife Coordination Act (PL 85-624; 16 USC 661-667d)

The Fish and Wildlife Coordination Act entrusts the Secretary of the Interior with providing assistance to, and cooperation with, federal, state, and public or private agencies and organizations to ensure that wildlife conservation receives equal consideration and coordination with other water-resource development programs. These programs can include the control (such as a diversion), modification (such as channel deepening), or impoundment (dam) of a body of water.

Executive Order 11990, Protection of Wetlands

In accordance with Executive Order 11990, "Protection of Wetlands," and U.S. Department of Transportation (USDOT) Order 5660.1a, "Preservation of the Nation's Wetlands," federal agencies must avoid undertaking or providing assistance for new construction in wetlands unless there is no practical alternative to such construction and the proposed action includes all practicable measures to minimize harm to the wetland.

Protection of Waters, Article 15, Title 5, New York State Environmental Conservation Law (ECL), Implementing Regulations 6 NYCRR Part 608

The New York State Department of Environmental Conservation (NYSDEC) is responsible for administering Protection of Waters regulations to prevent undesirable activities on surface waters (streams, lakes, and ponds). The Protection of Waters Permit program regulates five different categories of activities: disturbance of stream beds or banks of a protected stream or other watercourse; construction, reconstruction, or repair of dams and other impoundment structures; construction, reconstruction, or expansion of docking and mooring facilities; excavation or placement of fill in navigable waters and their adjacent and contiguous wetlands; and Water Quality Certification for placing fill or other activities that result in a discharge to waters of the United States in accordance with Section 401 of the CWA. As discussed in Chapter 4.1 of the DEIS, Norfolk Southern is not subject to certain state and local regulations and permit requirements, because of a pre-emption established by federal law to avoid barriers to interstate commerce. Nonetheless, Norfolk Southern will comply with these state and local regulations, including Article 24, as referenced below, when feasible and appropriate.

Article 24, ECL, Implementing Regulations 6 NYCRR Parts 663, 664, and 665

NYSDEC is responsible for implementing New York State's Freshwater Wetland Regulatory program. This program is intended to prevent despoliation and destruction of freshwater wetlands in accordance with the environmental protection regulations of the state. These regulations were designed to preserve, protect, and enhance the present and potential values of wetlands; protect the public health and welfare; and be consistent with the reasonable economic and social development of the state.

4.4.1-2-2 Wetland Delineation

Existing conditions within the Project area were evaluated based on information identified in habitat observations during a field survey and wetland delineations conducted on October 2, 2008 and September 7, 2010; maps; and the following online literature sources:

- "National List of Plants that Occur in Wetlands: Northeast (Region 1)," (Reed, 1988).
- Environmental Laboratory. 1987. "Corps of Engineers Wetlands Delineation Manual," Technical Report Y-87-I, USACE.
- U.S. Fish and Wildlife Service (USFWS), "Classification of Wetlands and Deepwater Habitats of the United States" (Cowardin et al., 1979).
- United States Geological Survey (USGS) topographic map (Portageville USGS 7.5-Minute Quadrangle).

- National Wetlands Inventory Map, USFWS.
- NYSDEC Freshwater Wetlands and Stream Classification Map (New York State Regulatory Freshwater Wetlands for Livingston and Wyoming Counties—ARC Export).
- Soil Survey Geographic (SSURGO) Soils Map, prepared utilizing United States Department of Agriculture Natural Resources Conservation Service Soil Survey Geographic Database for Livingston and Wyoming Counties, New York.
- Munsell® soil color charts (2000 Edition).

During the October 2008 wetland delineation, both ordinary high water (OHW) and mean high water (MHW) delineations were performed and dominant plant species, hydrologic features, and soil conditions were recorded. The boundaries of the wetlands were delineated using the criteria for vegetation, soils, and hydrology, as specified in USACE Wetlands Delineation Manual. The 1995 *NYSDEC Freshwater Wetlands Delineation Manual* (NYSDEC Manual) was not utilized, since no mapped NYSDEC wetlands were shown to occur within or adjacent to the Project site and adjacent area. A second wetland delineation took place on September 7, 2010 using the methods outlined in the 2009 *Interim Regional Supplement to the Corps of Engineers Wetland Delineation Manual: Northcentral and Northeast Region*. The wetland and stream boundaries remained consistent through the use of the USACE Wetlands Delineation Manual and the Regional Supplement; however, data collection requirements differed. A wetlands delineation report, dated June 2011, containing data collected using both methods is included as **Appendix A** to this DEIS.

After a field visit on April 27, 2011 with representatives of Norfolk Southern and the USACE and a review of the June 2011 report, the USACE issued a Preliminary Jurisdictional Determination, dated June 22, 2011, regarding the Project Site. The Preliminary Jurisdictional Determination is included in **Appendix A**.

4.4.1-3 EXISTING CONDITIONS

4.4.1-3-1 National Wetland Inventory Wetlands

The National Wetland Inventory (NWI) Wetlands Map that includes the Project area shows that one mapped watercourse exists within and immediately adjacent to the study area, as shown in **Figure 4.4.1-1**. This mapped watercourse corresponds to the Genesee River and is mapped as an upper perennial river with an unconsolidated bottom that is permanently flooded (R3UBH).

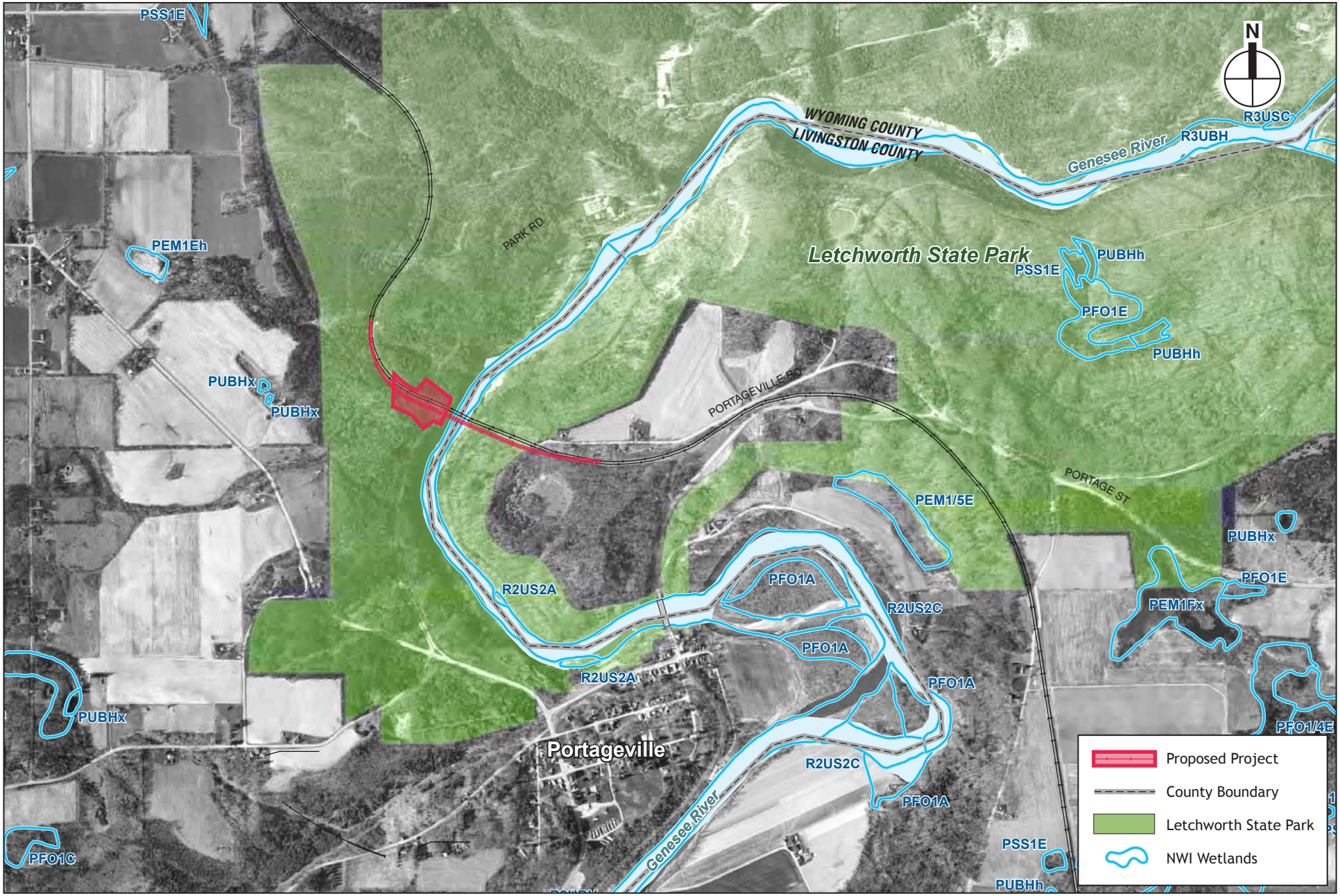
4.4.1-3-2 State Freshwater Wetlands

The NYSDEC Freshwater Wetlands Map shows no NYSDEC-mapped wetlands located within or immediately adjacent to the Project area (see **Figure 4.4.1-2**). However, a NYSDEC watercourse (i.e., the Genesee River) is located within the Project area. An analysis of the Genesee River is provided in Chapter 4.4.2, “Surface Waterbodies and Watercourses.”

4.4.1-3-3 Federal Jurisdictional Wetlands

The Genesee River is considered a water of the United States as defined by the USACE regulations because it was used in the past to transport interstate commerce. An unnamed stream located on the western side of the Genesee River gorge flows easterly into the Genesee River (and is a tributary to the Genesee River). This intermittent stream, identified as Stream B in the wetland report, flows beneath the railroad right-of-way within an approximately four-foot-square limestone culvert. As the stream is a tributary of the Genesee River, it is considered a water of the United States. However, the stream does not meet the criteria of a wetland but rather is considered a surface waterbody. An analysis of the stream is presented in Chapter 4.4.2, “Surface Waterbodies and Watercourses.” The location of Stream B is shown on **Figure 4.4.1-3**.

10.2.12



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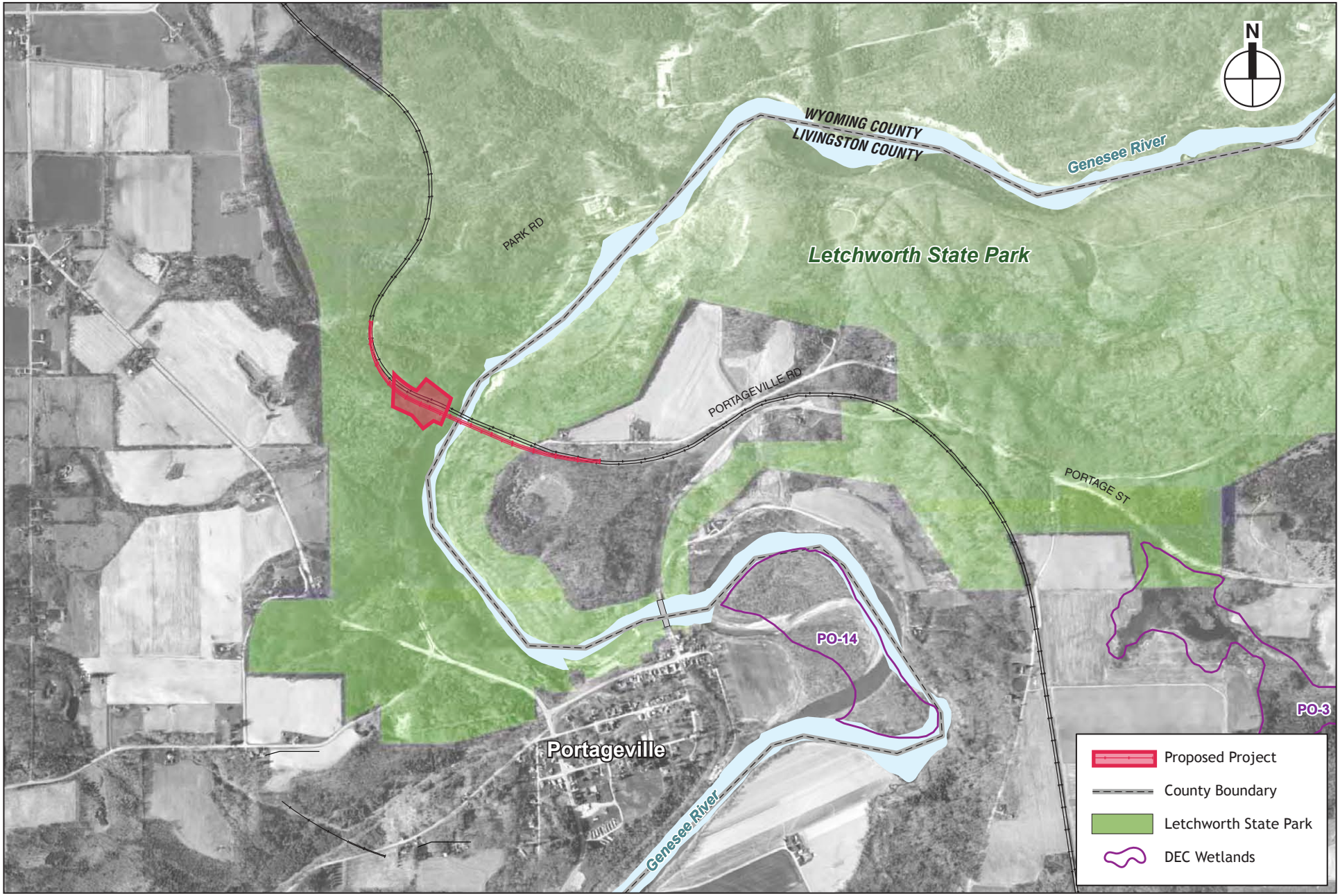
PORTAGEVILLE BRIDGE

National Wetlands Inventory (NWI) Wetlands near the Project Site

Figure 4.4.1-1

10.2.12



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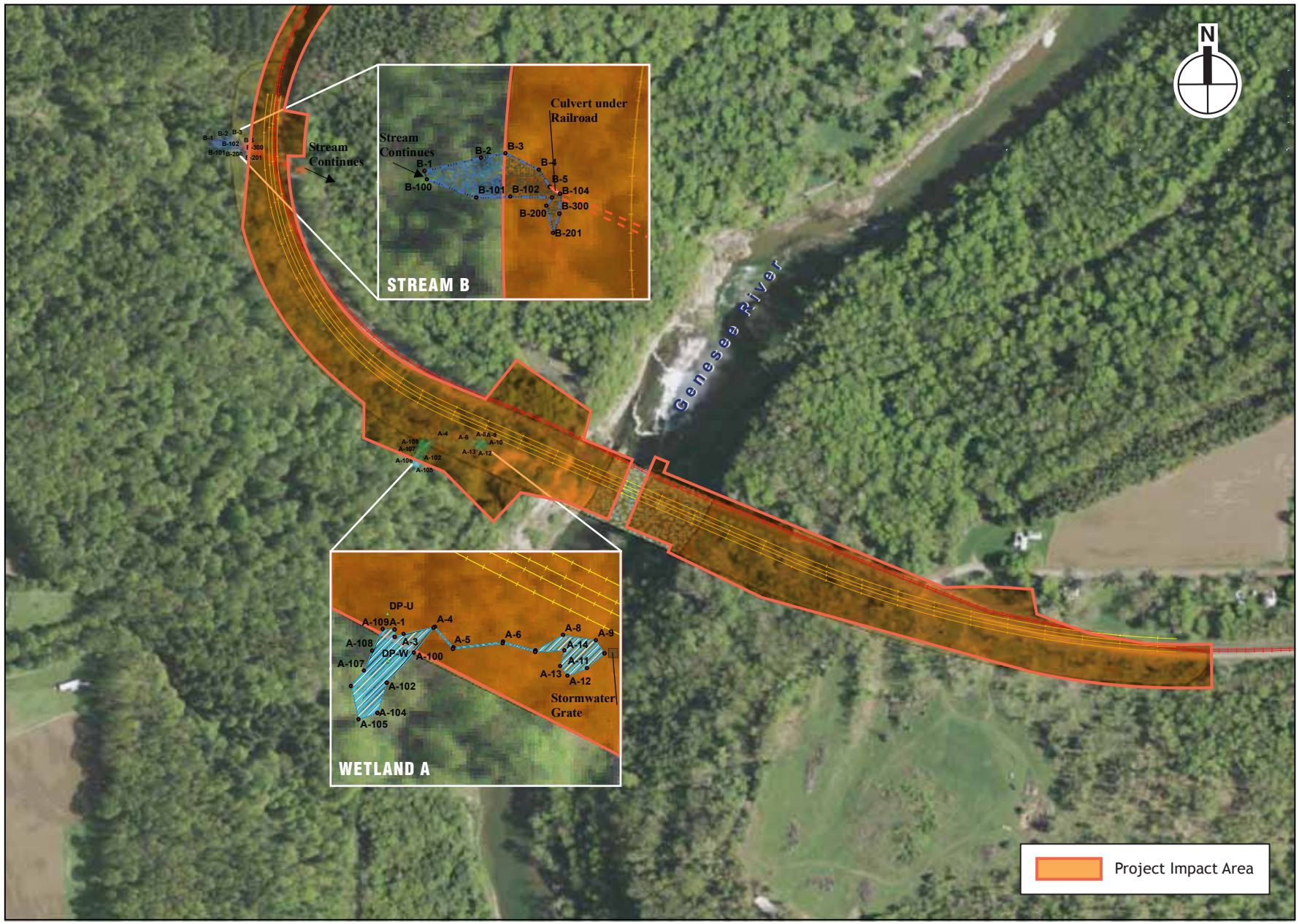
PORTAGEVILLE BRIDGE

NYSDEC Freshwater Wetlands
Figure 4.4.1-2

11.5.12



Location of Wetland A and Stream B

Figure 4.4.1-3

An approximately 0.09-acre wetland, referred to as Wetland A, was delineated within and close to the Project site roughly 400 feet upland of the western bank of the Genesee River, just west of the parking area that is within and to the south of the railroad right-of-way along Park Road (Highbridge Parking Area). The location of Wetland A is shown on **Figure 4.4.1-3**.

This wetland was formed as a result of gravel removal during construction of the existing Portageville Bridge in the mid-1800s. It is located at the base of the slope that supports the existing railroad right-of-way, adjacent to a cleared area at the edge of the Mary Jemison Trail. This small wetland is a result of overland flow from the trail and the hill, ponding from precipitation events, and, potentially, seepage from the slope. Water flows from the depression into a small channel, and then ponds immediately upgradient from a storm grate. Water drains from the wetland into the storm grate via a small channel. The storm grate collects water into a concrete-lined drainage basin that conveys water into the park drainage system. According to the New York State Office of Parks, Recreation and Historic Preservation (OPRHP), this wetland once supported spotted, Jefferson, and blue-spotted salamanders, but then was drained to protect the stability of the adjacent slope and is no longer used by those species.

This small, emergent wetland is located within a partial hemlock overstory. According to field observations and USFWS guidelines, Wetland A is composed primarily of palustrine, emergent, narrow-leaved persistent wetland cover type. Dominant wetland plant species include jewelweed (*Impatiens capensis)*, creeping jenny (*Lysimachia nummularia*), and green bulrush (*Scirpus atrovirens*).

The soil survey map (see **Figure 4.4.1-4**) shows this wetland area to consist of Williamson channery silt loam series. However, field observations indicate that soils in this wetland are not consistent with the mapped survey. Rather, the soils exhibited a wetter moisture regime and meet the USACE Manual criteria for hydric soils. Primary hydrology indicators consisted of surface water, a high water table, saturation in the upper 12 inches of the soil profile, and water-stained leaves. Secondary hydrology indicators were also present. For these reasons, this area meets the wetland hydrology criteria as defined in the USACE Manual.

In summary, more than 50 percent of the dominant plant species within and/or surrounding Wetland A are wetland plants. In addition, soils within the area were identified as hydric, wetland hydrology was confirmed by the above-described hydrology indicators, and ponding water was observed.

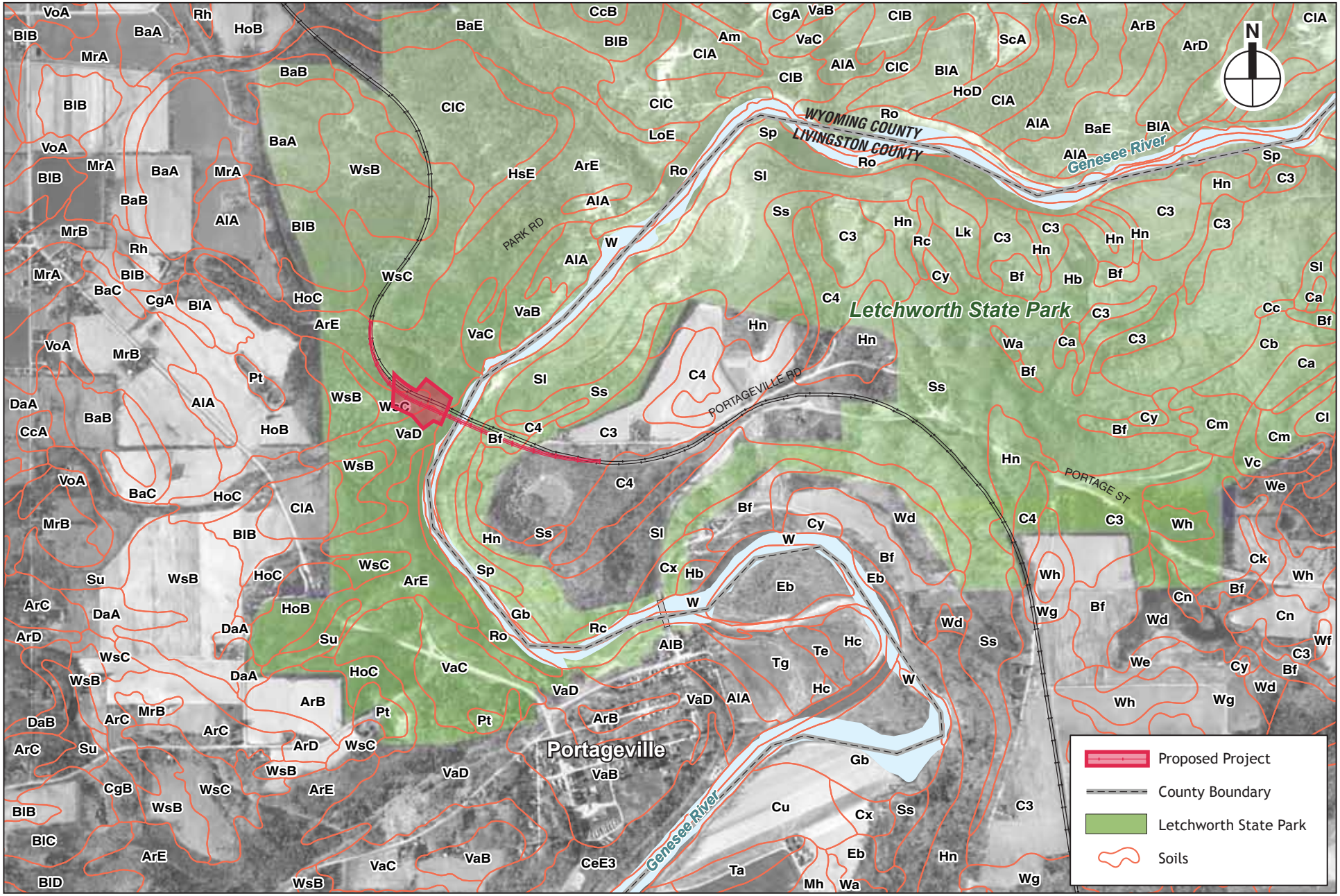
According to the Preliminary Jurisdictional Determination, dated June 22, 2011, regarding the Project site, Wetland A is within the jurisdiction of the USACE because of a hydrologic connection to the park's drainage system, which connects to the Genesee River. This area meets the criteria for wetland vegetation, soils, and hydrology as per USACE Wetlands Delineation Manual and Regional Supplement, and it is located adjacent or abutting a jurisdictional water feature, the Genesee River by way of the park's drainage system. Further information concerning details of vegetation, soils, and hydrology can be found in the wetland report provided in **Appendix A**.

4.4.1-4 EFFECTS ASSESSMENT

4.4.1-4-1 No Action Alternative

With the No Action Alternative, conditions within the Genesee River would be unchanged, and Wetland A, roughly 400 feet upland of the western bank of the river, would remain undisturbed.

10.2.12



Source: U.S. Department of Agriculture, Natural Resources Conservation Service, Soil Survey Geographic Database

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PORTAGEVILLE BRIDGE

Soil Survey Geographic (SSURGO) Soils Map

Figure 4.4.1-4

4.4.1-4-2 Preferred Alternative

National Wetland Inventory Wetlands and State Freshwater Wetlands

The only NWI wetland in the Project area is the Genesee River. Discussion of the operational effects to the Genesee River, a NYSDEC-mapped watercourse, is provided in Chapter 4.4.2, "Surface Waterbodies and Watercourses." There are no NYSDEC-mapped wetlands within or in the vicinity of the Project area.

Federal Jurisdictional Wetlands

The Preferred Alternative would shift the railroad alignment southward on its western approach to the bridge, which would require the placement of fill in a 0.03-acre portion of Wetland A, as discussed in Chapter 4.5, "Construction Effects." This would result in an unavoidable adverse impact to this portion of Wetland A. However, this wetland currently provides limited wildlife habitat and it does not support a unique plant community or plant species, and is not a substantial source of freshwater flow to the Genesee River or any other wetland or waterbody. Furthermore, impacts to this wetland have been minimized to the extent possible and ecological functions of the remaining 0.06-acre portion of this wetland, including hydrological connections to other waters, would be maintained during operation of the Preferred Alternative. As discussed in Chapter 4.5, "Construction Effects," all construction would be conducted in accordance with the USACE permit conditions, which would include measures to protect the remaining 0.06-acre portion of Wetland A. These would include the use of erosion and sediment control measures to protect the water quality of the wetland. Exclusion fencing would also be installed around the portion of the remaining 0.06-acre wetland that would be within the area of disturbance to keep machinery and foot traffic out of the wetland during construction. In addition, once construction in the vicinity of the remaining 0.06-acre wetland is complete, the disturbed areas surrounding the wetland would be restored with native vegetation, thus enhancing wildlife habitat and reducing the potential for sedimentation in the remaining wetland during operation. Therefore, the loss of 0.03 acres of wetland would not result in adverse impacts to regional wetland and wildlife resources during operation of the Preferred Alternative.

4.4.1-5 SUMMARY OF MITIGATION

As discussed above, the Preferred Alternative has been designed to meet the purpose and need for the Project and avoid or minimize environmental impacts, including to wetlands, to the greatest extent. The mitigation for loss of the small portion of wetland within Wetland A will be determined by the USACE during the permit review process. Once construction in the vicinity of the remaining 0.06-acre wetland is complete, the disturbed areas surrounding the wetland would be restored with native vegetation.

4.4.1-5-1 Executive Order 11990, Protection of Wetland Findings

As described above, the impacts to wetlands of the project site have been minimized to the extent possible and would be limited to 0.03 acres of Wetland A, a 0.09-acre wetland. The functions and values of the remaining 0.06-acre wetland would be maintained during the operation of the Preferred Alternative. Therefore, the intent of E.O. 11990 would be met.